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RESPONSE UNDER 37 CFR 1.116
EXPEDITED PROCEDURE
EXAMINING ART GROUP 2834

AF/2834

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of)	
CHRISTOPHER F. GALLMEYER, ET AL.)	Art Unit: 2834
Application No.: 10/036,688)	Examiner: Budd, Mark Osborne
Filed: December 21, 2001)	
For: METHOD AND APPARATUS FOR RESTRAINING TEMPERATURE INDUCED DEFORMATION OF A PIEZOELECTRIC DEVICE)	
Attorney Docket No.: 01-257)	

Peoria, Illinois 61629-6490

September 3, 2003

Mail Stop AF
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT AFTER FINAL REJECTION

Sir:

In response to the Official Action dated June 17, 2003, the period for response being until September 17, 2003, please amend the above-identified application as follows:

OK
to enter
MP
9/23/03

IN THE CLAIMS

Please amend the claims as follows:

Please cancel claims 1-14.

Claim 15 (original): A method for compensating for temperature induced deformation of a piezoelectric device that is operable to displace in a first direction as a function of a change in temperature, comprising:

preventing displacement of the piezoelectric device in the first direction beyond a first predetermined distance; and

redistributing a charge on the piezoelectric device due to the temperature change to relieve internal stresses of the piezoelectric device due to temperature induced deformation.

Claim 16 (original): The method of claim 15 wherein the piezoelectric device comprises a piezoelectric actuator.

Claim 17 (original): The method of claim 15 wherein the first predetermined distance is substantially zero.

Claim 18 (original): The method of claim 15 wherein preventing the displacement of the piezoelectric device comprises placing a physical barrier in a path of displacement of the piezoelectric device.

Claim 19 (original): The method of claim 15 wherein preventing the displacement of the piezoelectric device comprises:

coupling a connecting device with the piezoelectric device, the connecting device operable to displace in a second direction as a function of displacement of the piezoelectric device; and

limiting the movement of the connecting device in a second direction.

Claim 20 (original): The method of claim 19 wherein the second direction comprises substantially the first direction.

Claim 21 (original): The method of claim 15 wherein the piezoelectric device comprises a thermally pre-stressed bender actuator.

Claim 22 (original): The method of claim 19 wherein the connecting device comprises a rod having a head end opposite the piezoelectric device and wherein placing a physical barrier in the path of displacement of the connecting device comprises placing a physical barrier in the path of the head end of the rod.

Claim 23 (original): The method of claim 15 wherein the internal stresses of the piezoelectric device due to temperature induced deformation comprises an electric field created by the to temperature induced deformation.